

State of Hawaii
DEPARTMENT OF LAND AND NATURAL RESOURCES
Division of Aquatic Resources
Honolulu, Hawaii 96813

April 19, 2010

Board of Land and Natural Resources
State of Hawaii
Honolulu, Hawaii

Resubmittal of Request for Authorization and Approval to Issue a Papahānaumokuākea Marine National Monument Research Permit to Derek Smith, University of Hawaii, Hawaii Institute of Marine Biology, for Access to State Waters to Conduct Biological Studies on Maritime Heritage Sites

The Division of Aquatic Resources (DAR) hereby submits a request for your authorization and approval for issuance of a Papahānaumokuākea Marine National Monument research permit to applicant Derek Smith, Hawaii Institute of Marine Biology, pursuant to § 187A-6, Hawaii Revised Statutes (HRS), chapter 13-60.5, Hawaii Administrative Rules (HAR), and all other applicable laws and regulations.

The research permit, as described below, would allow entry and research activities to occur in Papahānaumokuākea Marine National Monument (Monument), including the NWHI State Marine Refuge and the waters (0-3 nautical miles) surrounding the following sites:

- Nihoa Island
- Necker Island (Mokumanamana)
- French Frigate Shoals
- Gardner Pinnacles
- Maro Reef
- Laysan Island
- Lisianski Island, Neva Shoal
- Pearl and Hermes Atoll
- Kure Atoll

The activities covered under this permit would occur between May 1, 2010 and August 31, 2010.

The Department has made an exemption determination for this permit in accordance with chapter 343, HRS and Chapter 11-200 HAR. See Attachment ("DECLARATION OF EXEMPTION FROM THE PREPARATION OF AN ENVIRONMENTAL ASSESSMENT UNDER THE AUTHORITY OF CHAPTER 343, HRS AND CHAPTER 11-200, HAR, FOR PAPAHA NAUMOKU AKEA MARINE NATIONAL MONUMENT RESEARCH PERMIT TO DEREK SMITH, UNIVERSITY OF HAWAII, HAWAII INSTITUTE OF MARINE BIOLOGY, FOR ACCESS TO STATE WATERS TO CONDUCT BIOLOGICAL STUDIES ON MARITIME HERITAGE SITES UNDER PERMIT PMNM-2010-028").

The proposed activities are largely a renewal of work previously permitted and conducted in the Monument.

INTENDED ACTIVITIES:

The Applicant proposes to continue studies to compare the biological community structure and diversity of maritime heritage resources sites with those of the surrounding areas to determine if there are significant differences, and to continue monitoring efforts to assess future changes in these communities.

To carry out these studies, the Applicant would:

- 1) survey biological communities;
- 2) measure environmental factors affecting community structure, and
- 3) characterize genetic diversity of coral and its endosymbionts.

The first activity refers to a detailed investigation of the biological community structure and diversity of organisms at maritime heritage resource sites and how this relates to surrounding areas. The applicant would conduct a combination of point-intercept quadrats, band transects and photo quadrats to assess the abundance, species richness, and distribution of biological organisms. These assessments would occur at the maritime heritage site as well as at an adjacent site to determine if the resource site differs from the surrounding biological communities.

The second activity would measure environmental factors such as salinity, temperature, current and other factors to determine whether the resource site is causing any differences in environmental conditions. Wherever possible, data loggers (3cm x3cm) would be placed on existing archaeological survey installations, but not directly on any maritime heritage resource. A maximum of two data loggers would be placed at any site; one in the vicinity of the resource site and one on the adjacent sampled reef area.

The third activity would include collection of coral colonies that harbor dinoflagellate symbionts. The Applicant requests to collect up to 100 coral samples per study site (50 inside the maritime heritage resource site and 50 from the surrounding area) for each of 5 species at each of ten atolls. In reality, however, the Applicant points out that the number of samples collected at each location in the Monument will be much lower as not all species are present at all sites and not all atolls have formally identified maritime heritage resource sites at this time.

The number of samples requested represents a new aspect of this work, as it is higher than the numbers requested last year (100/species/atoll up from 30/species/atoll).

The activities proposed by the applicant directly support the Monument Management Plan's priority management needs 3.1 – Understanding and Interpreting the NWHI (through action plan 3.1.4 – Maritime Heritage).

The activities described above may require the following regulated activities to occur in State waters:

- ☒ Removing, moving, taking, harvesting, possessing, injuring, disturbing, or damaging any living or nonliving Monument resource

- ☒ Drilling into, dredging, or otherwise altering the submerged lands other than by anchoring a vessel; or constructing, placing, or abandoning any structure, material, or other matter on the submerged lands
- ☒ Touching coral, living or dead
- ☒ Swimming, snorkeling, or closed or open circuit SCUBA diving within any Special Preservation Area or Midway Atoll Special Management Area

REVIEW PROCESS:

The permit application was sent out for review and comment to the following scientific and cultural entities: Hawaii Division of Aquatic Resources, Hawaii Division of Forestry and Wildlife, Papahānaumokuākea Marine National Monument (NOAA/NOS), NOAA Pacific Islands Regional Office (NOAA-PIRO), United States Fish and Wildlife Service Hawaiian and Pacific Islands National Wildlife Refuge Complex Office, and the Office of Hawaiian Affairs (OHA). In addition, the permit application has been posted on the Monument Web site since March 15th, giving the public an opportunity to comment. The application was posted within 40 days of its receipt, in accordance with the Monument's Public Notification Policy.

Comments received from the scientific community are summarized as follows:

Scientific reviews support the acceptance of this application.

Concerns raised were:

1. How will the project enhance preservation and conservations efforts?
2. What is the connection between coral connectivity and the main purpose of the expedition?
3. In 2009 the Applicant collected 135 coral biopsies related to maritime heritage resources for genetic analysis to improve decisions affecting their management. In 2010 the Applicant is asking to collect up to 1,000 coral biopsies related to maritime heritage resources. How will collecting up to 1,000 additional coral biopsies improve decisions affecting the management of the maritime heritage resources?
4. What is the total number of sampling sites the applicant will be collecting from and how many sites will there be per island/atoll?

Comments received from the Native Hawaiian community are summarized as follows:

Cultural reviews support the acceptance of this application. No concerns were raised.

Comments received from the public are summarized as follows:

No comments were received from the public on this application.

Additional reviews and permit history:

Are there other relevant/necessary permits or environmental reviews that have or will be issued with regard to this project? (e.g., MMPA, ESA, EA) Yes ☒ No ☐

If so, please list or explain:

- The proposed activities are in compliance with the National Environmental Policy Act.
- The proposed activities are in compliance with HRS Chapter 343 (exemption class HAR §11-200-8(a)(5)).
- State of Hawaii DLNR Section 106 Compliance (complete)

Has Applicant been granted a permit from the State in the past? Yes ☒ No ☐

If so, please summarize past permits:

- The Applicant was granted permit PMNM-2009-041 to conduct similar work in 2009.

Have there been any a) violations: Yes ☐ No ☒
b) Late/incomplete post-activity reports: Yes ☐ No ☒

Are there any other relevant concerns from previous permits? Yes ☐ No ☒

RESPONSE:

1. The Applicant states that conservation and preservation efforts of maritime heritage sites in the Monument have until recently focused on archaeological surveys documenting the material record, the removal of artifacts critical to site identification, and maritime heritage outreach and public education. The addition of an ecological assessment of these sites enhances the overall understanding of these resources and their effect on the environment and contributes to the information that managers need to make decisions regarding their continued protection. Investigation of the organisms associated with these sites may also provide insights into the biodeterioration of the material record which may necessitate excavation of specific artifacts. The Applicant points out that other programs are considering, or have just begun to add, ecological surveys based on the results of research being conducted in Hawaii.
2. The Applicant explains that the ecological surveys and coral genetic connectivity study surrounding the Maritime Heritage sites directly addresses the Monument Management Plan Activity MCS-1.5 which states: "Understanding the genetic diversity of species provides important information into how anthropogenic influences, such as debris accumulation, pollution, and climate change, can be evaluated Monument-wide." The Applicant states that these submerged resource sites are anthropogenic influences and understanding coral genetic diversity and connectivity at these sites is an important element of assessing the status of coral reefs Monument-wide.
3. The Applicant points out that most of the 135 coral samples collected last year were from corals that had settled out wholly on the wreck substrates. This year's collection

would focus on corals in the surrounding area for comparison. The Applicant explains that the peer-reviewed science on coral genetics recommends a minimum sample of 50-100 individuals to get a statistically viable representation of a population. Applicant also points out that his application requests samples for five species of corals, down from 28 species on his 2009 application. He explains that this reflects a much more directed effort, greater familiarity with the sites following the visit last season, and a better understanding of the sample sizes needed for a robust statistical analysis. In terms of the latter, 50-100 individuals is optimal to get a statistically viable representation of a population. Applicant does not anticipate being able to collect all five species of coral at each site visited because they may simply not be there, and as such it is likely that he will collect well below the 1000 biopsies listed, which is the absolute ceiling, but would provide the flexibility to sample according to the distribution of species at the specific sites. Applicant states that it is worth noting that the coral samples collected are non-lethal to the colony, the biopsy is smaller than the eraser on a pencil, and that the tiny portion removed contains only a few polyps, regenerates quickly and is not detrimental to the overall health of the coral colony.

4. The Applicant states he collected coral samples from five sites last year and would like to collect from these same five sites again this season (two at FFS, one at Pearl and Hermes, and two at Kure). Applicant does not envision collecting samples from more than six sites (one or two sites per island/atoll), yet he would like the flexibility to collect samples from an additional site in the event that a new resource is discovered by the Maritime Heritage Program.

STAFF OPINION:

DAR staff is of the opinion that Applicant has properly demonstrated valid justifications for his application and should be allowed to enter the NWHI State waters and to conduct the activities therein as specified in the application with certain special instructions and conditions, which are in addition to the Papahānaumokuākea Marine National Monument Research Permit General Conditions. All suggested special conditions have been vetted through the legal counsel of the Co-Trustee agencies (see Recommendation section).

MONUMENT MANAGEMENT BOARD OPINION:

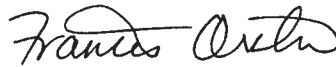
The MMB is of the opinion that the Applicant has met the findings of Presidential Proclamation 8031 and this activity may be conducted subject to completion of all compliance requirements. The MMB concurs with the special conditions recommended by DAR staff.

RECOMMENDATION:

That the Board authorize and approve a research Permit to Derek Smith, Hawaii Institute of Marine Biology, with the following special conditions:

1. This permit is not to be used for nor does it authorize the sale of collected organisms. Under this permit, the authorized activities must be for noncommercial purposes not involving the use or sale of any organism, by-products, or materials collected within the Monument for obtaining patent or intellectual property rights.
2. The permittee may not convey, transfer, or distribute, in any fashion (including, but not limited to, selling, trading, giving, or loaning) any coral, live rock, or organism collected under this permit without the express written permission of the Co-Trustees.
3. To prevent introduction of disease or the unintended transport of live organisms, the permittee must comply with the disease and transport protocols attached to this permit.
4. Tenders and small vessels must be equipped with engines that meet EPA emissions requirements.
5. Refueling of tenders and all small vessels must be done at the support ships and outside the confines of lagoons or near-shore waters in the State Marine Refuge
6. No fishing is allowed in State Waters except as authorized under State law for subsistence, traditional and customary practices by Native Hawaiians.

Respectfully submitted,



 Administrator

APPROVED FOR SUBMITTAL



LAURA H. THIELEN
Chairperson

Attachment

LINDA LINGLE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF AQUATIC RESOURCES
1151 PUNCHBOWL STREET, ROOM 330
HONOLULU, HAWAII 96813

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

KEN C. KAWAHARA
DEPUTY DIRECTOR - WATER

RUSSELL TSUJI
DEPUTY DIRECTOR - LAND

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

April 6, 2010

TO: Division of Aquatic Resources File

THROUGH: Laura H. Thielen, Chairperson

FROM: Francis Oishi, Program Manager *JO*
Division of Aquatic Resources

DECLARATION OF EXEMPTION FROM THE PREPARATION OF AN ENVIRONMENTAL ASSESSMENT
UNDER THE AUTHORITY OF CHAPTER 343, HRS AND CHAPTER 11-200, HAR, FOR
PAPAHĀNAUMOKUĀKEA MARINE NATIONAL MONUMENT RESEARCH PERMIT TO DEREK SMITH,
UNIVERSITY OF HAWAII, HAWAII INSTITUTE OF MARINE BIOLOGY, FOR ACCESS TO STATE WATERS
TO CONDUCT BIOLOGICAL STUDIES ON MARITIME HERITAGE SITES
UNDER PERMIT PMNM-2010-028.

The following permitted activities are found to be exempted from preparation of an environmental assessment under the authority of Chapter 343, HRS and Chapter 11-200, HAR:

Project Title:

Papahānaumokuākea Marine National Monument Research Permit to Derek Smith, University of Hawaii, Hawaii Institute of Marine Biology, for Access to State Waters to Conduct Biological Studies on Maritime Heritage Sites.

Permit Number: PMNM-2010-028.

Project Description:

The research permit, as described below, would allow entry and activities to occur in Papahānaumokuākea Marine National Monument (Monument), including state waters from May 1, 2010 through August 31, 2010.

This permit is intended to cover all activities necessary to compare the biological community structure and diversity of maritime heritage resources sites with those of the surrounding areas. The scope of activities in the permit include surveying biological communities as well as environmental factors (salinity, temperature, etc), and determining genetic diversity of coral and coral endosymbionts. This involves the collection of tiny coral samples, expected to be non-lethal to the colony. Surveys will take place on submerged shipwrecks and downed aircraft residing in shallow waters in the NWHI as well as neighboring natural reef structures. Great care will be taken to preserve the historical and physical integrity of all resource sites. Biological surveys will be visual by nature and will leave no lasting footprint. Environmental factors will be monitored via small temperature sensors (approximately the size of a quarter) and

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will not be placed on any artifacts or structural elements so as to not alter any remaining maritime heritage structures. Coral biopsies will be collected from the tips of coral colonies and the collector will not directly contact any portion of heritage structures or artifacts.

The proposed activities are in direct support of the Monument Management Plan's priority management needs 3.1 – Understanding and Interpreting the NWHI (through action plan 3.1.1 – Marine Conservation Science). In addition, activities to support understanding and interpreting the NWHI are generally addressed in the Monument Management Plan Environmental Assessment (December 2008) which resulted in a FONSI. This EA states that “[u]nderstanding the genetic diversity of species groups, and the way in which the populations in areas change could be helpful to forecast, prepare for and mediate potential threats to populations within the Monument.” (PMNM MMP Vol. 2, p.171). Monitoring surveys and genetic analyses, such as those proposed, would enhance this understanding.

Consulted Parties:

The permit application was sent out for review and comment to the following scientific and cultural entities: Hawaii Division of Aquatic Resources, Hawaii Division of Forestry and Wildlife, Papahānaumokuākea Marine National Monument (NOAA/NOS), NOAA Pacific Islands Regional Office (NOAA-PIRO), United States Fish and Wildlife Service Hawaiian and Pacific Islands National Wildlife Refuge Complex Office, and the Office of Hawaiian Affairs (OHA). A Section 106 application was submitted to the State Historic Preservation Division for review and comment. In addition, the permit application has been posted on the Monument Web site since March 15th, giving the public an opportunity to comment. The application was posted within 40 days of its receipt, in accordance with the Monument's Public Notification Policy.

Exemption Determination:

After reviewing HAR § 11-200-8, including the criteria used to determine significance under HAR § 11-200-12, DLNR has concluded that the activities under this permit would have minimal or no significant effect on the environment and that issuance of the permit is categorically exempt from the requirement to prepare an environmental assessment based on the following analysis:

1. All activities associated with this permit, including the site surveys and coral biopsies, have been evaluated as a single action. Since this permit involves an activity that is an increment of a larger total undertaking, i.e., the surveys and collection of coral samples, the categorical exemption determination here will treat all planned activities as a single action under HAR § 11-200-7.

2. The Exemption Class for Scientific Research with no Serious or Major Environmental Disturbance Appears to Apply. HAR §11-200-8A.5. exempts the class of actions which involve “basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource.” This exemption class has been interpreted to include research related to the development and management of various aquatic organisms, such as those being proposed.

Additionally, the Exemption Class #5, Exempt Item #4, includes “wildlife and game surveys, censuses, inventories, studies . . . collection and captive propagation....” Department of Land and Natural Resources, Exemption List for the Division of Fish and Game, approved January 19, 1976.

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Further, the Exemption Class #2, Exempt Item #3, includes the “installation and monitoring of climatology stations.” Department of Land and Natural Resources, Exemption List for the State of Hawaii, Department of Land and Natural Resources, approved December 4, 1991.

The proposed surveys and coral collection activities here appear to fall squarely under the exemption class identified under HAR § 11-200-8(a)(5), and as described under the 1976 and 1991 exemption lists, as involving the survey, photographing, and collection of aquatic biota, and the installation of sensors to monitor temperature changes. As discussed below, no significant disturbance to any environmental resource is anticipated in either the surveying of the maritime heritage site or coral collection.

3. Cumulative Impacts of Actions in the Same Place and Impacts with Respect to the Potentially Particularly Sensitive Environment Will Not be Significant. Even where a categorical exemption appears to include a proposed action, the action cannot be declared exempt if “the cumulative impact of planned successive actions in the same place, over time, is significant, or when an action that is normally insignificant in its impact on the environment may be significant in a particularly sensitive environment.” HAR § 11-200-8(B). To gauge whether a significant impact or effect is probable, an exempting agency must consider every phase of a proposed action, any expected primary and secondary consequences, the long-term and short-term effects of the action, the overall and cumulative effect of the action, and the sum effects of an action on the quality of the environment. HAR § 11-200-12.

No prior studies of this type have been undertaken to date on the locations proposed as part of this application. A Section 106 consultation has been conducted and approved as required in accordance with the National Historic Preservation Act and no adverse impacts are anticipated to the historic resources. Surveys and coral collections will not disturb the integrity of the heritage site or any associated artifacts. All scientific activities will be conducted under the supervision of the Monument’s Maritime Archaeologist to ensure proper care and best practices are observed while at these particularly sensitive environments. With this in mind, significant cumulative impacts are not anticipated as a result of this activity, and numerous safeguards further ensure that the potentially sensitive environment of the project area will not be significantly affected.

All activities will be conducted in a manner compatible with the management direction of the Monument Proclamation in that the activities do not diminish monument resources, qualities, and ecological integrity, or have any indirect, secondary, cultural, or cumulative effects. The joint permit review process did not reveal any anticipated indirect or cumulative impacts, nor did it raise any cultural concerns, that would occur as a result of these activities.

Since no significant cumulative impacts or significant impacts with respect to any particularly sensitive aspect of the project area are anticipated, the categorical exemptions identified above should remain applicable.

4. Overall Impacts will Probably be Minimal and Insignificant. Any foreseeable impacts from the proposed activity will probably be minimal, and further mitigated by general and specific conditions attached to the permit. Specifically, all research activities covered by this permit will be carried out with strict safeguards for the natural, historic, and cultural resources of the Monument as required by Presidential Proclamation 8031, other applicable law and agency policies and standard operating procedures. As stated previously, a Section 106 consultation has been conducted and no adverse impacts are anticipated to the historic resources. This project has

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been subject to the public review process for over a year, as the applicant was in fact permitted to conduct the same activities last year. The current request is an attempt to fulfill activities previously permitted.

Conclusion. Upon consideration of the permit to be approved by the Board of Land and Natural Resources, the potential effects of the above listed project as provided by Chapter 343, HRS and Chapter 11-200 HAR, have determined to will be of probable minimal or no significant effect on the environment and exempt from the preparation of an environmental assessment.

Laura H. Thielen
Chairperson, Board of Land and Natural Resources

Date

Papahānaumokuākea Marine National Monument
RESEARCH Permit Application

NOTE: *This Permit Application (and associated Instructions) are to propose activities to be conducted in the Papahānaumokuākea Marine National Monument. The Co-Trustees are required to determine that issuing the requested permit is compatible with the findings of Presidential Proclamation 8031. Within this Application, provide all information that you believe will assist the Co-Trustees in determining how your proposed activities are compatible with the conservation and management of the natural, historic, and cultural resources of the Papahānaumokuākea Marine National Monument (Monument).*

ADDITIONAL IMPORTANT INFORMATION:

- Any or all of the information within this application may be posted to the Monument website informing the public on projects proposed to occur in the Monument.
- In addition to the permit application, the Applicant must either download the Monument Compliance Information Sheet from the Monument website OR request a hard copy from the Monument Permit Coordinator (contact information below). The Monument Compliance Information Sheet must be submitted to the Monument Permit Coordinator after initial application consultation.
- Issuance of a Monument permit is dependent upon the completion and review of the application and Compliance Information Sheet.

INCOMPLETE APPLICATIONS WILL NOT BE CONSIDERED

Send Permit Applications to:

Papahānaumokuākea Marine National Monument Permit Coordinator

6600 Kalaniana'ole Hwy. # 300

Honolulu, HI 96825

nwhipermmit@noaa.gov

PHONE: (808) 397-2660 FAX: (808) 397-2662

**SUBMITTAL VIA ELECTRONIC MAIL IS PREFERRED BUT NOT REQUIRED. FOR
ADDITIONAL SUBMITTAL INSTRUCTIONS, SEE THE LAST PAGE.**

Papahānaumokuākea Marine National Monument Permit Application Cover Sheet

This Permit Application Cover Sheet is intended to provide summary information and status to the public on permit applications for activities proposed to be conducted in the Papahānaumokuākea Marine National Monument. While a permit application has been received, it has not been fully reviewed nor approved by the Monument Management Board to date. The Monument permit process also ensures that all environmental reviews are conducted prior to the issuance of a Monument permit.

Summary Information

Applicant Name: Loren Scott Godwin

Affiliation: Papahānaumokuākea Marine National Monument

Permit Category: Research

Proposed Activity Dates: May/June 2010

Proposed Method of Entry (Vessel/Plane): Vessel

Proposed Locations: Nihoa, Mokumanamana, French Frigate Shoals, Lisianski Island, Laysan Island, Pearl & Hermes, Kure, and Midway

Estimated number of individuals (including Applicant) to be covered under this permit:

7

Estimated number of days in the Monument: 30

Description of proposed activities: (complete these sentences):

a.) The proposed activity would...
represent baseline efforts towards an updated species inventory and determination of abundance of alien marine invertebrate species associated with natural and man-made habitats within the Monument

b.) To accomplish this activity we would
conduct faunal surveys by focused hand collections of mobile and sessile marine invertebrate fauna using SCUBA

c.) This activity would help the Monument by ...
providing information to support the Monument Alien Species Action Plan, specifically Strategy AS-2 "Engage in active surveillance to monitor existing infestations and to detect new infestations of alien species over the life of the plan."

Other information or background:

Section A - Applicant Information

1. Applicant

Name (last, first, middle initial): Godwin, Loren Scott

Title: NOAA NMS Resource Protection Specialist

1a. Intended field Principal Investigator (See instructions for more information):
Loren Scott Godwin

2. Mailing address (street/P.O. box, city, state, country, zip):

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

For students, major professor's name, telephone and email address: n/a

3. Affiliation (institution/agency/organization directly related to the proposed project):
Papahānaumokuākea Marine National Monument

4. Additional persons to be covered by permit. List all personnel roles and names (if known at time of application) here (e.g. John Doe, Research Diver; Jane Doe, Field Technician):

Dr. Megan Donohue, Field Researcher

Dr. Kaylene Keller, Field Researcher

Holly Bolick, Field Technician

Sarah Harris, Field Technician

Hoku Johnson, Field Technician

Justin Rivera, Field Technician

Section B: Project Information

5a. Project location(s):

<input checked="" type="checkbox"/> Nihoa Island	<input type="checkbox"/> Land-based	<input checked="" type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input checked="" type="checkbox"/> Necker Island (Mokumanamana)	<input type="checkbox"/> Land-based	<input checked="" type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input checked="" type="checkbox"/> French Frigate Shoals	<input type="checkbox"/> Land-based	<input checked="" type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input type="checkbox"/> Gardner Pinnacles	<input type="checkbox"/> Land-based	<input type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input type="checkbox"/> Maro Reef			
<input checked="" type="checkbox"/> Laysan Island	<input type="checkbox"/> Land-based	<input checked="" type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input checked="" type="checkbox"/> Lisianski Island, Neva Shoal	<input type="checkbox"/> Land-based	<input checked="" type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input checked="" type="checkbox"/> Pearl and Hermes Atoll	<input type="checkbox"/> Land-based	<input checked="" type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input checked="" type="checkbox"/> Midway Atoll	<input type="checkbox"/> Land-based	<input checked="" type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input checked="" type="checkbox"/> Kure Atoll	<input type="checkbox"/> Land-based	<input checked="" type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input type="checkbox"/> Other			

NOTE: There is a fee schedule for people visiting Midway Atoll National Wildlife Refuge via vessel and aircraft.

Location Description:

Man-made habitats and closely associated natural habitat at Midway Atoll, French Frigate Shoals and Kure Atoll. Opportunistic surveys of natural nearshore habitat at Nihoa, Mokumanamana, Laysan Island, Lisianski Island and Pearl and Hermes Atoll

5b. Check all applicable regulated activities proposed to be conducted in the Monument:

- ☒ Removing, moving, taking, harvesting, possessing, injuring, disturbing, or damaging any living or nonliving Monument resource
- ☐ Drilling into, dredging, or otherwise altering the submerged lands other than by anchoring a vessel; or constructing, placing, or abandoning any structure, material, or other matter on the submerged lands
- ☐ Anchoring a vessel
- ☐ Deserting a vessel aground, at anchor, or adrift
- ☐ Discharging or depositing any material or matter into the Monument
- ☒ Touching coral, living or dead
- ☐ Possessing fishing gear except when stowed and not available for immediate use during passage without interruption through the Monument
- ☐ Attracting any living Monument resource
- ☐ Sustenance fishing (Federal waters only, outside of Special Preservation Areas, Ecological Reserves and Special Management Areas)
- ☐ Subsistence fishing (State waters only)
- ☒ Swimming, snorkeling, or closed or open circuit SCUBA diving within any Special Preservation Area or Midway Atoll Special Management Area

6 Purpose/Need/Scope *State purpose of proposed activities:*

Of the more than 400 species of marine alien species recorded in the Hawaiian Archipelago only 13 are established in the Papahānaumokuākea Marine National Monument (Monument). These marine alien species established in the Monument are made up of 1 macro-algae, 9 marine invertebrates and 3 fish. The established alien marine invertebrates are mostly found at Midway Atoll and French Frigate Shoals but one invertebrate species has become established throughout the archipelago. Despite the fact that alien marine invertebrates have been recorded more often; less information concerning their abundance and distribution exists compared to alien algae and fish.

In order to control alien species, a hierarchical approach must address the problem at all stages of introduction from arrival to establishment and initiate management strategies ranging from prevention to eradication. Initial assessment and subsequent monitoring are essential in the control of marine aliens. Establishing such a monitoring effort in the Monument will require incremental efforts that will begin with new faunal surveys for marine alien species and the characterization of the abundance and distribution of established marine aliens.

The last faunal survey focusing on marine alien species in the Monument was conducted in 1996 at Midway Atoll (DeFelice, 1998). This survey only generated a species list and did not address the issues of abundance and distribution. Developing a monitoring scheme for marine alien species requires this information and needs to be determined for established populations in the Monument. The effort being proposed here represents the initial stage of establishing a baseline for inventory, abundance and distribution of the established alien marine invertebrate species in the Monument.

7. Answer the Findings below by providing information that you believe will assist the Co-Trustees in determining how your proposed activities are compatible with the conservation and management of the natural, historic, and cultural resources of the Monument:

The Findings are as follows:

a. How can the activity be conducted with adequate safeguards for the cultural, natural and historic resources and ecological integrity of the Monument?

Field efforts will be conducted and supervised at all times by trained marine invertebrate specialists with background in the marine alien species of Hawaii and the tropical Pacific. Collections of voucher organisms will be focused on benthic sessile and mobile marine invertebrates associated with both man-made and natural substrates in shallow near-shore habitat. In the case of this study the shallow near-shore zone is defined as shoreline to 10 m depth. No collection activities will take place in the vicinity of historic resources or cultural sites. If these resources are inadvertently encountered, all activities will cease and moved to another location

b. How will the activity be conducted in a manner compatible with the management direction of this proclamation, considering the extent to which the conduct of the activity may diminish or enhance Monument cultural, natural and historic resources, qualities, and ecological integrity, any indirect, secondary, or cumulative effects of the activity, and the duration of such effects? The Monument Management Plan (MMP) classifies alien species as a threat to Monument resources and defines a specific action plan (ASAP 3.3.2) directed at alien species. Within this action plan a specific strategy exists that states the importance of engaging in active surveillance for monitoring of existing infestations and to detect new infestations of alien species over the life of the MMP (Strategy AS 2). This process will lead to monitoring protocols, which are also a required management activity from the MMP (AS 2.3).

c. Is there a practicable alternative to conducting the activity within the Monument? If not, explain why your activities must be conducted in the Monument.
This is an activity specifically for meeting requirements for the MMP involving alien species, therefore this activity must be within the Monument

d. How does the end value of the activity outweigh its adverse impacts on Monument cultural, natural and historic resources, qualities, and ecological integrity?
The goal of this project at this early stage is to provide baseline information that will produce an updated species inventory but also set the stage for long term monitoring.

e. Explain how the duration of the activity is no longer than necessary to achieve its stated purpose.
The faunal inventory of proposed habitats is incremental and will require multiple efforts over coming years to attain accurate species lists, abundance and distribution data.

f. Provide information demonstrating that you are qualified to conduct and complete the activity and mitigate any potential impacts resulting from its conduct.
I have been conducting marine alien species surveys in the Hawaiian Archipelago since 2000. I am a qualified taxonomic generalist with expertise in crustaceans, polychaetes, echinoderms, tunicates, bryozoans and mollusks. I have peer reviewed taxonomic publications in various Hawaiian fauna and numerous technical reports from species inventories conducted in the Hawaiian Archipelago. This project will partner with colleagues from Bishop Museum also with expertise in marine alien species, as well as experience in collection, preservation and archiving of marine specimens.

g. Provide information demonstrating that you have adequate financial resources available to conduct and complete the activity and mitigate any potential impacts resulting from its conduct.
The PI (Godwin) is full time staff at the Monument and co-investigators will be funded either by the PMNM-HIMB research partnership or budgetted contract funding.

h. Explain how your methods and procedures are appropriate to achieve the proposed activity's goals in relation to their impacts to Monument cultural, natural and historic resources, qualities, and ecological integrity.

The training and experience of the investigators allows for specimen collection that is not haphazard. This focused collection will minimize the taking of unnecessary specimens and therefore lessen the impacts to other organisms.

i. Has your vessel has been outfitted with a mobile transceiver unit approved by OLE and complies with the requirements of Presidential Proclamation 8031?

This project will operate from the NOAA R/V Hiialakai, which is outfitted with the appropriate VMS

j. Demonstrate that there are no other factors that would make the issuance of a permit for the activity inappropriate.

This effort will be conducted by experts in the collection and preservation of marine invertebrate species and the taxonomy of tropical reef invertebrates associated with both man-made and natural habitats. Additionally, expertise exists on the team in the areas of quantitative analysis, monitoring design and spatial data technologies. The goal of this early stage is to generate baseline data on species inventories and habitat characterization that will lend itself to development of a monitoring scheme.

8. Procedures/Methods:

The procedures below describe a process that will be incremental and repeated opportunistically in the next five years. The amount of time needed for faunal collections, taxonomy and quantifying the spatial extent of species and correlations with habitat types is extensive and will involve future permit submissions. This effort is a component of the overall alien species management program described in the MMP and therefore will be on-going.

Marine Alien Invertebrate Faunal Survey

This effort will require lethal sampling through hand collection of marine invertebrate fauna associated with man-made structures and near shore natural habitat combined with in situ surveys. Collections will be conducted on SCUBA or snorkelling and will be combined with in situ photographs. A target list of established species and will be used for reference while conducting in situ surveys for distribution (See Attachment).

Collections of known established species will be conducted to create a reference collection at Bishop Museum. Additional collections will be for invertebrate faunal groups that have a greater likelihood of representing new marine alien species records (See Attachment). The determination for this second category is based on marine alien species commonly found in the main Hawaiian Islands and regularly associated with anthropogenic transport mechanisms (Godwin, 2003). The list for potential new records is not exhaustive and there are other species that could be found but the list provides a reference source for collections.

A maximum of 20 individuals for each unique taxon will be collected at each island. For sessile fauna, an individual will be represented by a section 5cmX5cm for encrusting growth forms and a 1cm piece for erect/branching growth forms. This is to include enough material for taxonomic and molecular analysis. This sessile fauna will not

include corals and will generally be associated with man-made and natural rubble habitat.

Collections will be brought back to the research vessel and preserved with methods appropriate for both taxonomic identification and molecular analysis. Collections will be deposited at Bishop Museum upon return to Oahu for post-processing and storage.

Habitat Characterization

This component will begin with the gross characterization of man-made habitat at Midway Atoll and French Frigate Shoals. The first task in this incremental portion of the project will be to determine surface area of submerged habitat associated with piers and docks at Midway Atoll and French Frigate Shoals. This will be begun during the 2010 field season and carry on in successive years to include other man-made habitat.

NOTE: If land or marine archeological activities are involved, contact the Monument Permit Coordinator at the address on the general application form before proceeding, as a customized application will be needed. For more information, contact the Monument office on the first page of this application.

9a. Collection of specimens - collecting activities (would apply to any activity): organisms or objects (List of species, if applicable, attach additional sheets if necessary):

Common name:
See Attachment

Scientific name:
See Attachment

& size of specimens:
20 individuals maximum/ island
Non-coral sessile fauna: encrusting growth form- 5cmX5cm section, erect/branching growth form-1cm sample

Collection location:
Man-made habitats and associated natural substrate and opportunistically on other natural substrate

☒ Whole Organism ☒ Partial Organism

9b. What will be done with the specimens after the project has ended?

All specimens will be preserved and archived at Bishop Museum. Portions of specimens needed for taxonomic analysis will be further processed at Bishop Museum. Portions preserved for molecular analysis will be held at Bishop Museum for use by Hawaii Institute of Marine Biology

9c. Will the organisms be kept alive after collection? ☐ Yes ☒ No

• General site/location for collections:

• Is it an open or closed system? ☐ Open ☐ Closed

• Is there an outfall? ☐ Yes ☐ No

• Will these organisms be housed with other organisms? If so, what are the other organisms?

• Will organisms be released?

10. If applicable, how will the collected samples or specimens be transported out of the Monument?

Specimens will be preserved and transported aboard the NOAA R/V Hiialakai. The collections will not include coral specimens

11. Describe collaborative activities to share samples, reduce duplicative sampling, or duplicative research:

Samples for molecular analysis will be collected and stored for future use by Hawaii Institute of Marine Biology. Collaboration with taxonomists at museums and universities around the world will be necessary for some organisms to attain greater taxonomic resolution.

12a. List all specialized gear and materials to be used in this activity:

Only standard open-circuit SCUBA and hand tools will be used.

12b. List all Hazardous Materials you propose to take to and use within the Monument:

95% Ethanol, 10% Formalin

13. Describe any fixed installations and instrumentation proposed to be set in the Monument:

Not applicable

14. Provide a time line for sample analysis, data analysis, write-up and publication of information:

Samples will be accessioned at Bishop Museum and identified to the lowest taxonomic level by June 2011. Publications will follow in the Fall of 2011.

15. List all Applicants' publications directly related to the proposed project:

Godwin, L.S., L. Harris, A. Charette and R. Moffitt. 2008. The marine invertebrate species associated with the biofouling of derelict fishing gear in the Pāpahānaumokuākea–Marine National Monument: A focus on marine non-native species transport. Preliminary report prepared for NOAA Pacific Islands Fisheries Science Center, Coral Reef Ecosystem Division. 26pp.

Martin J.W., S. Godwin, R. Moffit. 2008. Additions to the decapod crustacean fauna of the Hawaiian Islands, I. A review of the crab genus *Sakaila* Manning & Holthuis, 1981 (Decapoda, Brachyura, Calappoidea) with a description of a new species from French Frigate Shoals, Northwestern Hawaiian Islands. *Zootaxa*

Godwin, L.S. 2008. The hermit crab *Calcinus isabellae*, Poupin, 1997 (Crustacea: Decapoda: Anomura: Diogenidae), a new record for the Hawaiian Archipelago, including a review of the genus *Calcinus* Dana, 1851 in Hawai'i. *Bishop Museum Occasional Papers* 100: 52-54

Castro, P & L.S. Godwin. 2006. First record of coral crabs of the family Tetraliidae (Crustacea: Brachyura) from the Hawaiian Islands. *Bishop Museum Occasional Papers*. 88:53-55

Godwin, L.S. & H. Bolick. 2006. Inventory of intertidal and shallow sub-tidal marine invertebrates at Kalaupapa National Historic Park. Contribution No. 2006-003 to the Hawaii Biological Survey. 58 pp.

Godwin, L.S., K.S. Rodgers & P.L. Jokiel. 2006. Reducing potential impacts of invasive marine species in the Northwestern Hawaiian Islands Marine National Monument. A report for research conducted under DOI, NOAA, National Ocean Service MOA 2005-008/6882 Amendment No. 001, "Research in Support of the NWHI Coral Reef Ecosystem Reserve, HIMB, SOEST, UH Mānoa."

Godwin, L.S. 2003. Hull fouling of maritime vessels as a pathway for marine species invasions to the Hawaiian Islands. *Biofouling* 19 (Supplement): 123-131

Zabin, C.J., J.T. Carlton and L.S. Godwin. 2004. First report of the Asian sea anemone *Diadumene lineata* from the Hawaiian Islands. *Bishop Museum Occasional Papers* 79: 54-58

Godwin, L.S., L.G. Eldredge and K. Gaut. 2004. The Assessment of Hull Fouling as a Mechanism for the Introduction and Dispersal of Marine Alien Species in the Main Hawaiian Island. Final report submitted to the Hawaii Coral Reef Initiative Research Program. Bishop Museum Technical Report 28. Contribution 2004-015 to the Hawaii Biological Survey

Godwin, L.S. & N. L. Evenhuis. Marine Molluscs. In: Evenhuis & Eldredge (eds). *Natural History of Nihoa and Necker Islands* pp. 147-155. Bishop Museum Press 2004. 220 pp.

Godwin L.S. & L. G. Eldredge. Marine Invertebrates. In: Evenhuis & Eldredge (eds). Natural History of Nihoa and Necker Islands pp. 156-177. Bishop Museum Press 2004. 220 pp.

Godwin, S. 2005. Preliminary species inventory for marine invertebrates associated with the coral reef communities of the Northwestern Hawaiian Islands. Report submitted to the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve.

Friedlander, A.M., G. Aeby, R. Brainard, A. Clark, E. DeMartini, S. Godwin, J. Kenyon, R. Kosaki, J. Maragos, and P. Vroom. 2005. The State of Coral Reef Ecosystems in the Northwestern Hawaiian Islands. pp. 270-311. In J. Waddell (ed.), The State of Coral Reef Ecosystems of the United States and the Pacific Freely Associated States: 2005. NOAA Technical Memorandum NOS NCCOS 11. NOAA/NCCOS Center for Coastal Monitoring and Assessment's Biogeography Team, Silver Spring, MD. 522pp.

DeFelice, R.C., D. Minton, and L.S. Godwin. 2002. Records of shallow-water marine invertebrates from French Frigate Shoals, Northwestern Hawaiian Islands, with a note on nonindigenous species. Report to the U.S. Fish and Wildlife Service. Bishop Museum Technical Report No. 23. Contribution No. 2002-01 to the Hawaii Biological Survey

With knowledge of the penalties for false or incomplete statements, as provided by 18 U.S.C. 1001, and for perjury, as provided by 18 U.S.C. 1621, I hereby certify to the best of my abilities under penalty of perjury of that the information I have provided on this application form is true and correct. I agree that the Co-Trustees may post this application in its entirety on the Internet. I understand that the Co-Trustees will consider deleting all information that I have identified as “confidential” prior to posting the application.

Signature

Date

**SEND ONE SIGNED APPLICATION VIA MAIL TO THE MONUMENT OFFICE
BELOW:**

Papahānaumokuākea Marine National Monument Permit Coordinator
6600 Kalaniana'ole Hwy. # 300
Honolulu, HI 96825
FAX: (808) 397-2662

DID YOU INCLUDE THESE?

- ☒ Applicant CV/Resume/Biography
- ☒ Intended field Principal Investigator CV/Resume/Biography
- ☒ Electronic and Hard Copy of Application with Signature
- ☐ Statement of information you wish to be kept confidential
- ☒ Material Safety Data Sheets for Hazardous Materials

Marine Alien Invert Collections list_Godwin

Species Recorded in PMNM Species Recorded in SE HI Archipelago but not PMNM

PHYLUM PORIFERA		
Class Calcarea		
Family Heteroporidae		
		Heteropora glomerata Bowerbank, 1873
Class Demospongiae		
Order Hadromerida		
Family Suberitidae		
		Suberites zetekii de Laubenfels, 1936
Family Chalinidae		
		Sigmadocia cf. caerulea Hechtel, 1985
Family Niphatidae		
		Gelliodia fibrosa Wilson, 1925
Order Poecilosclerida		
Family Mycalidae		
		Mycale grandis Thiele, 1903
Family Raspallidae		
		Echinodictyum asperum Ridely and Dendy, 1886
Family Dysideidae		
		Dysidea sp.
PHYLUM CHORDATA		
Class Hydrozoa		
Family Halocordylidae		
		Pennaria disticha Goldfuss, 1820
Family Bougainvillidae		
		Bougainvillia ramosa van Beneden, 1844
Family Sertulariidae		
		Dynamena cristoides Lamouroux, 1824
Class Anthozoa		
Family Diadumenidae		
		Diadumene lineata (Verrill, 1869)
Subclass Octocorallia		
		Carljoia risei Duchassaing & Michelotti, 1860

Marine Alien Invert Collections list_Godwin

Species Recorded In PMNM		Species Recorded In SE HI Archipelago but not PMNM
PHYLUM ANNELIDA		
Family Sabellidae		
	Sabellastarte spectabilis Grube, 1878	Sabellastarte spectabilis Grube, 1878
		Branchiomma nigromaculata Baird, 1865
Family Serpulidae		
	Salmacina cystaria	Hydroides elegans Haswell, 1883
		Hydroides dirampha Mörch, 1863
		Hydroides crucigerus Mörch 1863
		Pomatoleios kraussii Baird, 1865
		Pomatoceros cf. minutus Riola, 1941
		Salmacina tribranchiata Moore, 1923
		Serpula vermicularis Linnaeus, 1767
		Serpula cf. watsoni Willey, 1905
Family Spirobridae		
		Eulaeospira orientalis Pillai, 1960
		Simplicaria pseudomilitaris Thiriot-Quievreux, 1965
		Janua pagenstecheri Quatrefages, 1865
		Neodexospora praecuta Vire, 1972
		Neodexospora foraminosa Moore and Bush, 1904
		Pileolaria militaris Claparede, 1868
		Circaus cf. amercana Saint-Joseph, 1894
PHYLUM MOLLUSCA		
Family Vernetidae		
		Vernetus aili Hadfield & Kay, 1972
Class Gastropoda		
		Hipponix australis Lamarck, 1819
		Crucibulum spinosum (Sowerby, 1824)
Class Bivalvia		
		Chama macerophylla Gmelin, 1791
		Chama fibula Reeve, 1846

Marine Alien Invert Collections list_Godwin

Species Recorded in PMNM		Species Recorded in SE HI Archipelago but not PMNM
PHYLUM CRUSTACEA		
Class Cirripedia		
Order Thoracica		
Family Balanidae		
	Balanus reticulatus Ujwami, 1967	Balanus amphitrite Darwin, 1854
	Balanus venustus Darwin, 1854	Balanus eburneus Gould, 1841
		Balanus trigonus Darwin, 1854
		Megabalanus californicus Pilsbry, 1916
		Megabalanus tanagrae Pilsbry, 1928
		Megabalanus peninsularis Pilsbry, 1916
Family Chthamalidae		
	Chthamalus proteus Dando & Southward, 1980	
PHYLUM CRUSTACEA		
Order Amphipoda		
Family Caprellidae		
		Caprella acutifrons
Family Gammaridae		
		Ericthonius brasiliensis Dana, 1853
		Jassa falcata Sexton & Reid, 1951
Class Decapoda		
Order Brachyura		
Family Grapsidae		
		Pachygrapsus fakaravensis Rahibun, 1907
		Metopograpsus oceanicus (Jacquinot, 1852)
		Nanosesamia minutum (De Man, 1887)
Family Xanthidae		
		Glabropilumnus seminudus (Miers, 1884)
Class Stomatopoda		
		Gonodactylaceus mutatus Lanchester, 1903
PHYLUM PYCNOGONIDA		
		Anoplodactylus sp.
PHYLUM ECHINODERMATA		
Class Ophiuroida		
		Ophiactis savignyi Muller and Troschel, 1842
PHYLUM BRYOZOA		

Marine Alien Invert Collections list_Godwin

Species Recorded in PMNM		Species Recorded in SE HI Archipelago but not PMNM
Class Gymnolaemata		
Family Bugulidae		
		Bugula neritina Linnaeus, 1758
		Bugula robusta MacGillivray, 1869
Family Chortzoporidae		Holoporella pilaefera Canu & Bassler, 1929
Family Scrupocellariidae		Rhamphostomella argentea Hincks, 1881
Family Hippopodiniidae		Scrupocellaria cf. sinuosa Canu & Bassler, 1927
Family Schizoporellidae		Hippopodina feegeensis Busk, 1884
Family Vesicularidae	Schizoporella errata Waters, 1878	
	Anathia distans Busk, 1886	
Family Watersiporidae		
		Watersipora edmondsoni Soule & Soule, 1968
SUBPHYLUM UROCHORDATA		
Class Ascidiacea		
Suborder Aplousobranchia		
Family Didemnidae		Diplosoma listerianum Milne-Edwards, 1841
Suborder Phlebobranchia		
Family Ascididae		Phallusia nigra Savigny, 1816
		Ascidia syndnensis
Suborder Stolidobranchia		
Family Styelidae		
	Polycarpa aurita Sluiter, 1890	Botrylodes simodensis Saito and Watanabe, 1981
	Cnemidocarpa irene Hartmeyer, 1907	Symplegma brakenhielmi Michaelson, 1904
		Polyandrocarpa sagamiensis Tokioka, 1953
		Eusynstyela hartmeyeri Michaelson, 1904
		Styela plicata Lesueur, 1823
		Styela clava Herdman, 1882
Family Pyuridae		
		Microcosmus exasperatus Heller, 1878
		Herdmania monus Savigny, 1816

Papahānaumokuākea Marine National Monument Compliance Information Sheet

1. Updated list of personnel to be covered by permit. List all personnel names and their roles here (e.g. John Doe, Diver; Jane Doe, Field Technician, Jerry Doe, Medical Assistant):

Dr. Megan Donohue, Field Researcher
Dr. Kaylene Keller, Field Researcher
Holly Bolick, Field Technician
Sarah Harris, Field Technician
Hoku Johnson, Field Technician
Justin Rivera, Field Technician

2. Specific Site Location(s): (Attach copies of specific collection locations):

Midway Atoll, Inner Harbor: 28.213985,-177.363124
Midway Atoll, Fuel Piers: 28.217615,-177.368445
Midway Atoll, East Island Pier: 28.210127,-177.335057
Midway Atoll, West Beach Old Sewage Pipe: 28.21059,-177.387251
French Frigate Shoals, Tern Island Pier: 23.867848,-166.288775
Kure Atoll, Pier: 28.393311,-178.296189
Lisianski Island: West channel: 26.065353,-173.971303
Pearl & Hermes Atoll lagoon: 27.834568,-175.832949

3. Other permits (list and attach documentation of all other related Federal or State permits): N/A

3a. For each of the permits listed, identify any permit violations or any permit that was suspended, amended, modified or revoked for cause. Explain the circumstances surrounding the violation or permit suspension, amendment, modification or revocation. N/A

4. Funding sources (Attach copies of your budget, specific to proposed activities under this permit and include funding sources. See instructions for more information): PMNM Alien Species Action Plan, Activity AS-2.1 "Survey distributions and populations of known alien species at regular intervals" (see pg 6)

5. Time frame:

Activity start: May 10, 2010

Activity completion: June 3, 2010

Dates actively inside the Monument:

From: May 11, 2010

To: June 2, 2010

Describe any limiting factors in declaring specific dates of the proposed activity at the time of application: 1) Change in vessel timetable between May 10-June 3, 2010 due to mechanical problem

2) Change is vessel timetable between May10-June 3, 2010 due to weather.

Personnel schedule in the Monument:

6. Indicate (with attached documentation) what insurance policies, bonding coverage, and/or financial resources are in place to pay for or reimburse the Monument trustees for the necessary search and rescue, evacuation, and/or removal of any or all persons covered by the permit from the Monument:

7. Check the appropriate box to indicate how personnel will enter the Monument:

☒ Vessel

☐ Aircraft

Provide Vessel and Aircraft information: NOAA R/V Hi'ialakai

8. The certifications/inspections (below) must be completed prior to departure for vessels (and associated tenders) entering the Monument. Fill in scheduled date (attach documentation):

☐ Rodent free, Date:

☐ Tender vessel, Date:

☐ Ballast water, Date:

☐ Gear/equipment, Date:

☐ Hull inspection, Date:

9. Vessel information (NOTE: if you are traveling aboard a National Oceanic and Atmospheric Administration vessel, skip this question):

Vessel name:

Vessel owner:

Captain's name:

IMO#:

Vessel ID#:

Flag:

Vessel type:

Call sign:

Embarkation port:

Last port vessel will have been at prior to this embarkation:

Length:

Gross tonnage:

Total ballast water capacity volume (m3):

Total number of ballast water tanks on ship:

Total fuel capacity:

Total number of fuel tanks on ship:

Marine Sanitation Device:

Type:

Explain in detail how you will comply with the regulations regarding discharge in the Monument. Describe in detail. If applicable, attach schematics of the vessel's discharge and treatment systems:

Other fuel/hazardous materials to be carried on board and amounts:

Provide proof of a National Oceanic and Atmospheric Administration (NOAA) Office of Law Enforcement-approved Vessel Monitoring System (VMS). Provide the name and contact information of the contractor responsible for installing the VMS system. Also describe VMS unit name and type:

VMS Email:

Inmarsat ID#:

*** Individuals MUST ENSURE that a type-approved VMS unit is installed and that its automatic position reports are being properly received by the NOAA OLE system prior to the issuance of a permit. To make sure your VMS is properly configured for the NOAA OLE system, please contact NOAA OLE at (808) 203-2503 or (808) 203-2500.**

*** PERMITS WILL NOT BE ISSUED TO INDIVIDUALS ENTERING THE MONUMENT VIA VESSEL UNTIL NOAA OLE HAS CONTACTED THE MONUMENT PERMIT COORDINATOR WITH A 'POSITIVE CHECK' READING.**

10. Tender information:

On what workboats (tenders) will personnel, gear and materials be transported within the Monument? List the number of tenders/skiffs aboard and specific types of motors:

Additional Information for Land Based Operations

11. Proposed movement of personnel, gear, materials, and, if applicable, samples:

12. Room and board requirements on island:

13. Work space needs:

DID YOU INCLUDE THESE?

- ☐ Map(s) or GPS point(s) of Project Location(s), if applicable
- ☐ Funding Proposal(s)
- ☐ Funding and Award Documentation, if already received
- ☐ Documentation of Insurance, if already received
- ☐ Documentation of Inspections
- ☐ Documentation of all required Federal and State Permits or applications for permits